

PROJECT DESCRIPTION

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC SIGNAL AT MD 924 (MAIN STREET) AND CHURCHVILLE ROAD IN HARFORD COUNTY. THE SIGNAL WILL BE RECONSTRUCTED IN ONE PHASE. MD 924 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION. INTERSECTION OPERATION
1. NORMAL OPERATION
THE INTERSECTION WILL OPERATE IN A TWO PHASE, SEMI-TRAFFIC ACTUATED MODE.

CONTROLLER REQUIREMENTS:

A NEW FULLY - TRAFFIC - ACTUATED - EIGHT- PHASE TRAFFIC SIGNAL NEMA PHASE 5 FULLY ACTUATED CONTROLLER IN A STRETCH POLE - MOUNTED SYSTEM READY CABINET WILL BE INSTALLED AT THIS LOCATION.

SPECIAL NOTE:

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7631 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	SPEC. NO.	QUANTITY	DESCRIPTION
971016	816	- 1 EA	FURNISH PHASE 5 (FULLY ACTUATED CONTROLLER AND STRETCH POLE MOUNTED CABINET)
973023	813	70.59 S.F.	FURNISH SHEET ALUMINUM SIGNS
		- 2 EA	D3-2 SIGN 96"x16"
		- 1 EA	R3-1 SIGN 30"x30"
		- 3 EA	R5-1 SIGN 30"x30"
		- 1 EA	R3-2 SIGN 30"x30"
		- 4 EA	R10-4 SIGN 9"x12"
		- 1 EA	R3-5(L) SIGN 30"x36"
		- 1 EA	R3-5(R) SIGN 30"x36"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	SPEC. NO.	QUANTITY	DESCRIPTION
585621	SP-555	225 L.F.	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)
585625	SP-555	40 L.F.	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE)
120500	104	L.S.	MAINTENANCE OF TRAFFIC
203030	205	10 C.Y.	TEST PIT EXCAVATION
837001	804	8 EA.	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIA. X 10 FT. LENGTH.
860272	814	12 EA.	FURNISH AND INSTALL 12 IN. L.E.D. VEHICULAR TRAFFIC SIGNAL HEAD SECTION BLACK FACED
861105	810	285 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG).
861116	810	30 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG).
861107	810	760 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG).
861108	810	185 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG).
816001	816	1 EA.	FURNISH AND INSTALL VIDEO DETECTION CAMERA.
816005	816	1 EA.	FURNISH AND INSTALL 250 FT. VIDEO DETECTION CABLE.
816015	816	1 EA.	FURNISH AND INSTALL VIDEO INTERFACE FOR DETECTION SYSTEM.
811001	811	4 EA.	FURNISH AND INSTALL ELECTRICAL HANDHOLE.
805140	805	80 L.F.	FURNISH AND INSTALL 4 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.
805135	805	60 L.F.	FURNISH AND INSTALL 3 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.
805155	805	160 L.F.	FURNISH AND INSTALL 4 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - SLOTTED.
818004	818	1 EA.	FURNISH AND INSTALL 10 FT BREAKAWAY PEDESTAL POLE.
818030	818	2 EA.	FURNISH AND INSTALL 27 FT STEEL MAST ARM POLE W 38 FT MAST ARM
818004	810	4 EA.	FURNISH AND INSTALL 10 FT BREAKAWAY STEEL PUSH BUTTON PED POLE (4 IN. SCHEDULE 40 PIPE).
801004	801	8.65 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	810	220 L.F.	FURNISH AND INSTALL STRANDARD BARE COPPER GROUND WIRE (NO. 6 AWG)
801117	810	80 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 WIRE NO. 4 AWG THHN/THWN
860292		1 EA.	CUT CLEAN, GALVANIZE AND CAP SIGNAL STRUCTURE
805145	805	50 L.F.	FURNISH AND INSTALL 2 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - SLOTTED.
862101	810	200 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
805135	805	20 L.F.	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT GALVANIZED SLEEVE.
862102	815	100 L.F.	SAW CUT FOR SIGNAL (LOOP DETECTOR)

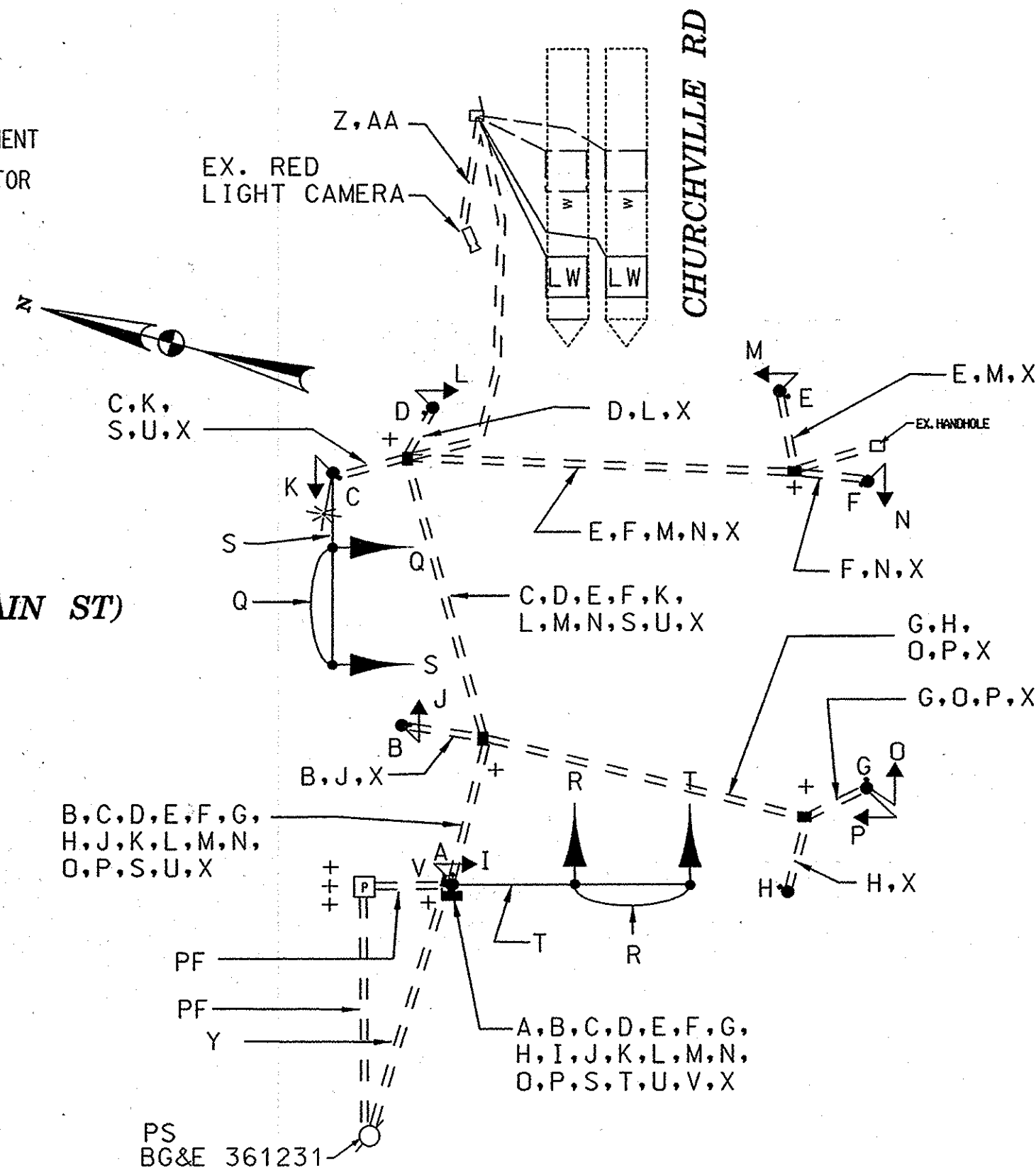
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

CATAGORY CODE NO.	SPEC. NO.	QUANTITY	DESCRIPTION
813014	813	21.75 S.F.	INSTALL GROUND MOUNTED SIGN.
813015	813	48.84 S.F.	INSTALL OVERHEAD SIGN.
831010	806	1 EA.	FURNISH AND INSTALL 250 WATT HPS LAMP AND LUMINAIRE
871201	805	1 EA.	INSTALL CONTROLLER AND CABINET - POLE MOUNTED
866101	806	1 EA.	FURNISH AND INSTALL 10 FT. LIGHTING ARM ON SIGNAL STRUCTURE
800000		8 EA.	FURNISH AND INSTALL 16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD (PAINTED BLACK)
800000		1 EA.	FURNISH AND INSTALL TWO WIRE CONTROL UNIT.
800000		8 EA.	FURNISH AND INSTALL AUDIBLE TACTILE PEDESTRIAN PUSH BUTTON STATION AND SIGN.
873001		L.S.	REMOVE AND SALVAGE EXISTING EQUIPMENT
807202	807	1 EA.	FURNISH AND INSTALL METERED SERVICE PEDESTAL.
800000		L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL / EQUIPMENT
861104	810	100 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)

C. SHA FORCES TO REMOVE CONTROLLER AND ALL AUXILIARY EQUIPMENT. CONTROLLER CABINET, EXISTING SIGNAL POLES, SIGNAL HEADS, HAND BOXES AND ALL OTHER EQUIPMENT THAT IS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

QUANTITY	DESCRIPTION
1 EA.	POLE MOUNTED CABINET.

MD 924 (MAIN ST)



PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT 4 ARE AS FOLLOWS:

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2781

MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-2761

MR. DONALD SCHAEFER
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 321-2821

MR. MIKE PASQUARIELLO
UTILITY ENGINEER
PHONE: (410) 321-2841

MR. EDWARD RODENHIZER
MANAGER, SIGNAL OPERATIONS SECTION
PHONE: (410) 787-7652

MR. RICHARD DAFF
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

1	2	3	4	5	6	7	8	9	10	11	12
(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)
(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)

PHASE 2	G	G	R	R	W	W	W	W	DW	DW	DW	DW	
PED CLEAR	G	G	R	R	FL/DW*	FL/DW*	FL/DW*	FL/DW*	DW	DW	DW	DW	
PHASE 2 CHANGE	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW	
PHASE 4	R	R	G	G	DW	DW	DW	DW	DW	DW	DW	DW	
PHASE 4 CHANGE	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW	
PHASE 4 ALT	R	R	G	G	DW	DW	DW	DW	W	W	W	W	
PED CLEAR	R	R	G	G	DW	DW	DW	DW	FL/DW*	FL/DW*	FL/DW*	FL/DW*	
PHASE 4 ALT CHANGE	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK	

WIRING KEY

A-H) 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

I-R) 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

S-T) 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

U) 2-CONDUCTOR TREY CABLE (NO. 12 A.W.G.)

V) VIDEO CABLE FOR CAMERA

W) VIDEO DETECTION ZONE

X) STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

Y) UNDERGROUND PHONE LINE

Z,AA) 2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)

PF - POWER FEED 3-CONDUCTOR (NO. 4 AWG)

PS - POWER SOURCE

+ - 3/4 IN. x 10 FT. GROUND ROD

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

**MD 924 (MAIN ST.) STREETScape IMPROVEMENTS
FROM MD 22 (FULFORD AVE.) TO GORDON ST.
(DESIGN BUILD) MD 924 (MAIN ST) @CHURCHVILLE RD**

MD 924 (MAIN ST) @ CHURCHVILLE RD GENERAL INFORMATION SHEET

SCALE NO SCALE DATE _____ CONTRACT NO. _____DESIGNED BY H. KILAN COUNTY HARFORDDRAWN BY _____ LOGMILE 12002200.06CHECKED BY _____ T.I.M.S. NO. G-985F.A.P. NO. _____ TOD NO. 1911N

DRAWING NO. _____ TS - 05 OF 14 SHEET NO. 06 OF 15



JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future®

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APPROVALS	REVISIONS
TEAM LEADER	(N) 9-1-2007 HAI865184 RECONSTRUCT SIGNAL DUE TO GEOM. CHANGES
ASSIST. DIR. CHIEF	CGM
DIVISION CHIEF	(M) 6-5-00 ASSAULT FOR RED LIGHT CAMERA
OFFICE DIRECTOR	RRZ
	(L) 12-1997 REPLACE INTERCONNECT CABLE
	DMP

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